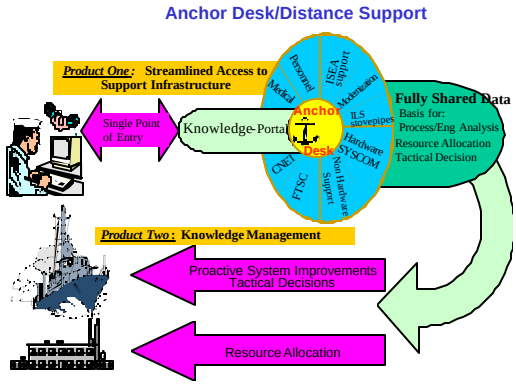
Distance Support

Abstract

In March 1999 CNO N86, message 151339ZMAR99, tasked NAVSEA to take the lead in the development and coordination of Distance Support efforts. The objective of Distance Support is to provide the Fleet with collaborative infrastructure support that leverages both Navy and Industry resources to improve readiness, reduce workload afloat, and improves the Sailors' quality of service. In the past, support efforts and new initiatives had been developed and implemented separately. Today's e-business and information technology provides the ability to consolidate both singular efforts and data into a cohesive support structure and a shared data environment. Distance Support will be a key enabler for process and infrastructure transformation and the cornerstone of the Navy for the 21st century providing a collaborative infrastructure and shared data environment. This initiative will leverage technological capabilities with the System Commands, Fleet resources, and Industry partners to improve Sailor quality of service and provide efficient, effective, and responsive support worldwide. The Distance Support effort, coordinated by the Anchor Desk, is being developed through a phased implementation plan that utilizes existing e-business technology and IT-21 infrastructure for fleet support policies, processes and infrastructure transformation. When fully implemented, the Distance Support Concept will provide the Sailor a single point-of-entry and process for all administrative, technical, and personal support. The shared data environment will provide: the support infrastructure the data to proactively analyze and improve system and equipment operability/maintainability, the System Commands the data and information for resource allocation and Fleet/ships commanders the data and information to support tactical Decisions



Introduction

As the Navy continues to reshape operational philosophies to match the threats facing the world today as well as fiscal realities, the role of the US Navy sailor shipboard is also changing. Gone is the day that tasking is moved shipboard simply because the sailor is there. As highly trained and valued professional technicians, the sailor of the future will optimize his time and talents around his skill area, not in menial tasking. New ship design for the Twenty-first century reflects this change and the explosion of communication technology seen in the commercial arena help lend credence to the thought that in the Navy today, business no longer needs to be conducted as usual. Pivotal to the Navy's ability to leverage cutting edge technologies to redefine the role of our sailors and fleet operations is a re-definition of the roles and methods by which the shore infrastructure provides the support required by every ship. The depth and breadth of capability found within the many facets of the infrastructure that supports fleet activities is now and always has been phenomenal. The performance of US forces during the Gulf War is testimony to this capability. But many facets of the current Fleet Support processes and infrastructure were created during the Cold War and tend to follow stovepiped, independent functionalities. Current fiscal austerity and restructure has strained support effectiveness. In an effort to regain effectiveness and efficiency many support organizations have turned to the benefits offered by information technologies as a legitimate method to create more coverage with fewer resources. Unfortunately, without coordinated and integrated policy, process and infrastructure change the shipboard sailor's task of obtaining the needed service is even more confusing. Clarity, simplicity effectiveness and efficiency are achieved through both, applied discipline of technology, and process/infrastructure adaptation/transformation. In March 1999,CNO N86 tasked NAVSEA to take the lead in the development and coordination of the Navy's Distance Support efforts. The Distance Support Concept focuses on

providing the Fleet a single point-of-entry or portal utilizing cutting edge technology to provide the infrastructure and support necessary to improve readiness and reduce workload afloat. This concept envisions an integrated support process and infrastructure that provides the tools, communication, coordination, and discipline needed to provide the support required by the Fleet. It will establish the architecture and collaborative infrastructure necessary for a shared data environment to provide the support infrastructure the ability to proactively analyze and improve system and equipment operability/maintainability. Distance Support will incorporate the capabilities of the Naval System Commands, Industry, and existing technology to provide greater efficiency in the support processes for today's Fleet as well as the optimally manned, contractor supported platforms of the future. The Distance Support Concept, when fully implemented, will utilize the Distance Support Portal/Anchor Desk (WWW@anchordesk.navy.mil/1.877.41TOUCH) as its implementation vehicle to provide the tools required for a single entry point to support the Fleet and reduce the numerous support options that today's Warfighter must traverse. The plethora of toll free phone numbers, web pages, government agencies, and contractor support facilities dictates that the Navy streamlines its support process. In accordance with CNO tasking, Distance Support is being implemented in an integrated fashion to provide a support infrastructure that will become more efficient, provide the Fleet a standard, consistent means to access the growing support provider network ashore, and consolidate data reporting requirements. On May 11,1999 then NAVSEA Vice Commander (RADM Phil Balisle) initiated the Distance Support/Anchor Desk concept. In his opening remarks he succinctly described the future by stating, the driving force behind the Distance Support Concept is the proposed reduced manning of the DD 21, the follow on 21st century platforms, and their relative dependence on shore based infrastructure. To strive for workload reduction afloat by seeking greater efficiencies in support processes only makes sense

in an atmosphere of reduced shipboard manning, shrinking shore infrastructure, and budget reductions. In building the Navy of the 21st Century, Distance Support initiatives will need to have one eye on the future while drawing from the experience of the past. Distance Support also provides a cost efficient means to support legacy platforms.

Phased Implementation

The implementation of the Distance Support concept and its tools is a three phased approach designed to provide proactive and optimum support to the fleet. When fully developed, these tools will comprise the Distance Support Portal/Anchor Desk and will include e-support capabilities the Navy Integrated Call Center, platform resident data, Tele-Assist/Collaborative functions, and a Shared Data Environment. The goal is to align current functional stovepipes (maintenance, training, supply, logistics, medical, and personnel, etc.) into a seamless support network, which will provide efficient, effective support. To achieve the Distance Support vision, a transformation of the support processes that serve the deckplate sailor must occur. This change will affect every level of the support infrastructure that currently provides service. As greater efficiency is demanded and more workload is shifted from shipboard to shore, support providers will evolve into a collaborative infrastructure, free of functional stovepipes. Through knowledge sharing and leveraging of resources and investments within a common data environment, we will be able to better support the Fleet of the 21st century. The Distance Support effort is characterized as a key enabler to adapt and transition today's support infrastructure and business processes to leverage the tools and technology of e-business and information technology. The management philosophy is to be the catalyst to establish a collaborative transformation effort between government and industry. A three-phased approach has been selected to ensure structure; business process and technology are coordinated and integrated for an end-to-end collaborative support process. The first phase established the structure and process for centralized support and authoritative data and support source, the second phase established the

process and infrastructure to deliver the capability to deployed units via the Distance Support Portal and the third phase focuses on a fully shared data environment.

PHASE ONE

To establish the structure and process for centralized support and authoritative data and support there must be a centralizing effort that simplifies the support process and removes the burden of understanding the support infrastructure for the sailor. For this change to be effective, there must be a central point that bears the responsibility for ensuring issues get resolved. In simple terms, this can be thought of as the trouble log maintained by many ships in DCC. Call one number and your problem is now the Chief Engineer's responsibility. The example of the shipboard trouble log contains several lessons that must be incorporated in the Navy's information clearinghouse as well, access must be simple and widely known; trust must be earned, that when a request for support is placed actions will occur and the infrastructure must be prepared to support the request. The Integrated Call Center (ICC) commenced operations in August 1999 when VADM Nanos received the first call from an operational fleet unit. A joint NAVSEA/NAVSUP initiative, the ICC has performed exceptionally well since its inception and continues to prove its worth through superior customer service and resource utilization. Although the subject matter of calls received by the ICC varies from technical to non-specific, the common thread connecting them is that a customer service representative handles all calls, assigns a call request number, and tracks it to completion. The initial mission tasked the call center to accomplish three primary goals: to connect customers to the right support provider, to ensure the caller's issue is tracked and monitored through resolution, and to track overall metrics. Examples of recent calls include one from a customer requesting technical assistance in repairing the AN/SPS-67 Radar. This call was transferred to the appropriate technical organization for assistance and a solution to the problem was obtained. Another customer called requesting the availability of a nonstandard gate valve for an Auxiliary Steam System.

The ICC located a source for the valve and provided the customer with the source's name and phone number. The valve was subsequently procured and installed prior to deployment. As another example, the widow of a former service member called requesting information on survivor benefits. The ICC connected the customer to the Human Resources Office at FISC San Diego who provided the appropriate information and support. Key to all these examples is the ability to map with accuracy authoritative sources of support in advance of receiving the call. The Source of Support matrix must account for technical authority and policy requirements, be detailed enough to connect to the right person, be broad enough to handle any question when it comes in, and be flexible enough to be rapidly accessed. Meeting these requirements is not a simple task under any set of circumstances; it is complicated further by the near constant reorganization the Navy has experienced during the past several years. In its current form, this Source of Support Matrix is an electronic file resident in CDMD-OA (Configuration Data Management Database-Open Architecture) that identifies support providers for shipboard hardware and software. This matrix was constructed using data that was assembled during Y2K equipment compliance research as well as information from other databases used to identify equipment maintenance and technical manual update responsibility. With its roots in shipboard equipment, the APL (allowance parts list) is the key data element for searching. As the role has expanded, key data fields for other service areas have been identified, standardized and integrated into the open architecture. Since its inception, the call center has evolved and expanded its source of support network. Utilizing a single, 1-877 number to provide support, the ICC vectors calls to the appropriate support provider (NAVSEA, NAVAIR, SPAWAR, NAVSUP, FTSC, etc.). In September 1999,representatives from each of the Hardware Systems Commands met to discuss a joint Navy Integrated Call Center (NICC). Agreement from each HSC representative was gained and the NICC moved one step closer to reality. This joint venture produced an agreement and began the process of formulating a

single 1-800 number for questions and concerns. As a result of the Integrated Ship Maintenance and Supply Readiness (ISMSR) group, a joint CINCLANTFLT/CINCPACFLT message, released in February 2000, announced the use of a single 1-800 number for support (1-877-41-TOUCH). This decision established the ICC as the Navy's Integrated Call Center. The initial move was not to eliminate other working 1-800 support lines, but rather to incorporate them into a single, consolidated support framework. In addition to voice capability, the NICC has the capability to receive support requests via the WEB (www.AnchorDesk.navy.mil), by SALTS transmissions (AnchorDesk), by E- mail (help@AnchorDesk.navy.mil), or by Naval message (AnchorDesk). The types of support requests handled through electronic submission include research requests, part information, technical manuals, technical requests, training, warranty information, technical documentation, technical assists, shipping information, and feedback reports.

PHASE TWO

Phase Two of the Distance Support Implementation Plan, the Distance Support Portal, expands the scope of support provided, brings the communication tools and infrastructure access aimed at reducing shipboard workload to deployed forces. To establish the process and infrastructure to deliver this capability to deployed units, via the Distance Support Portal, fleet support processes and infrastructure must be adapted and transited to utilize the existing tools and technology of e-business and information technology. As communications capabilities rapidly expand, disciplines and protocols that describe how these technologies will be utilized must also be in place to protect tactical sensitivities while providing the required support. In February 2000, the Hardware Systems Commands participated in a NAVSEA sponsored Distance Support conference to coordinate and consolidate individually developed Distance Support Tele-Assist initiatives. From the many outstanding Distance Support initiatives on display, a collaborative set of capabilities were chosen for implementation into a standard, Distance Support Tele-assist package selected for installation on the LINCOLN Battle

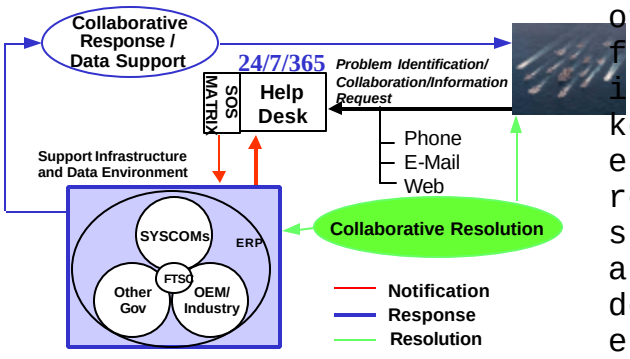
Group. Following the establishment of the Distance Support tool set NAVSEA, teamed with the other Partner Hardware System Commands, Support Commands, and the Fleet, developed initial business rules for the LINCOLN Battle Group and associated support organizations. This package provided the Fleet with the first ever integrated, user-friendly means to access the support infrastructure. This package covered a range of services including equipment maintenance, supply, technical/logistics, medical, training, and ministry, was installed in complete compliance with current directives and was fully supported at the time of installation. The initial Distance Support tool set available to the Battle Group via the Distance Support Portal/CD, includes Intra/Inter Collaboration, E-support, NICC, One-Touch-Supply, TeleMaintenance, TeleMedicine, Joint Aviation Technical Data (JATDI), Sailor-to-Engineer, CNET, Navy Learning Network, and TeleMinistry. This Distance Support initiative is the first Navy integrated, coordinated and bundled e-business fleet support initiative. Upgrades to the Distance Support package will be based on Battle Group feedback, fleet requirements, and technological advancements. While working groups and teaming efforts continue to address Bandwidth/INTERNET access and SIPERNET/NIPERNET issues, evolving initiatives, such as NMCI,ERP and TF WEB should be significant enables to establish the required conductivity, security and shared data environment. Commencing with the LINCOLN Battle Group, the Distance Support package is being installed on each subsequent Battle Group.

Abraham Lincoln Battle Group Distance Support Results

The Distance Support Portal, proved to be an extremely valuable and useful support tool set to the LINCOLN Battle Group. The E-support function allowed for electronic access, in virtually any form available, including web-site www.AnchorDesk.navy.mil, email help@AnchorDesk.navy.mil, naval message address CAD: ANCHORDESK, and SALTS. The Collaboration/Tele-Support portion of the LINCOLN Battle Group package provided intra/inter collaboration

ship to ship and ship to shore access to technical assistance and material support that significantly improved material condition and readiness. The ability to see and discuss problems in real time with a technical expert in a virtual environment not only reduced costs, but it allowed sailors to do their jobs in a more efficient manner. The ALBG utilized the tool set provided by the installed Distance Support package to conduct daily BG maintenance and logistics meetings that included TYCOMS, NICC, CTF 53, C5F and AOR. These daily interactive meetings allowed the support infrastructure to respond in a fashion that produced a reduction in time required to close CASREP actions by 5 days.

Inter Battle Group Collaboration/Data Support CONOPS



Distance Support was utilized by the ALBG over 1600 times and this managed use of Distance Support tools had no impact on currently available bandwidth. The advantage of a simple, common structure is that users did not have to navigate a series of complicated steps to achieve desired support. The current support categories were designed so a limited number of selections delivered the user to the desired area. Another advantage of this simple design is the flexibility to incorporate new support categories or amend current categories. Upgrades to the Distance Support package will be based on Battle Group feedback, fleet requirements, and technological advancements.

PHASE THREE

The final phase is the establishment of a shared data environment that allows for genuine sharing of knowledge between the fleet and SYSCOM/support infrastructure. This is key to the ability to enhance performance, and reduce life-cycle cost and support resource allocation tactical decisions. This data environment must allow for simple data entry to ensure its use on a regular basis at a fine

level of data. It must also be easily manipulated around a few highly standardized data elements to allow for accurate data processing. The resulting knowledge must be used as a proactive tool where service providers are taking action to support ship's needs even before that need is recognized onboard ship. Building on existing infrastructure, the shared data environment will provide both users and providers with real time access to performance data and metrics. The real time access will allow managers and planners to make better, more relevant decisions. The Distance Support effort has established a collaborative structure, process and standard set of metrics/data elements to support the shared data environment of the future. Initiatives underway such as the Enterprise Resource Program (ERP), IT-21, Navy Marine Corp Internet (NMCI) and Task Force WEB are all key enablers of the Distance Support program and close working relations with these groups have been established.

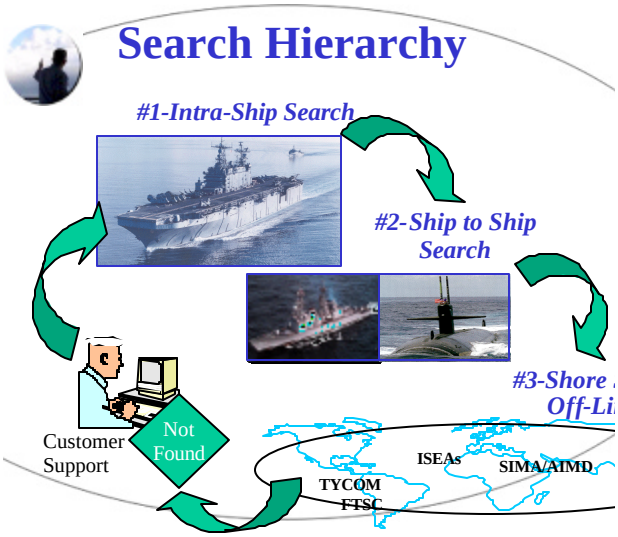
Distance Support Course for the Future

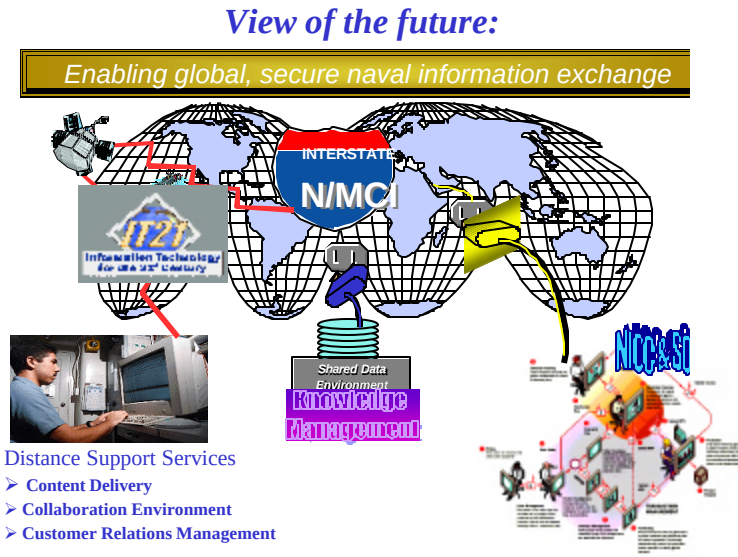
The success of the Distance Support program in the ALBG deployment has prompted CINCLANTFLT to call for a more rapid insertion of this capability in the fleet than had been previously planed, as a result we are currently finalizing installation planning for over 140 ships within the next 6 months, these installations will allow all LANTFLT platforms to utilize the advantages gained by this capability in the very near future.

The next iteration of Distance Support will provide a capability to the fleet that has never been available before, it will include the use of large amounts of platform resident data that is tailored to the ships requirements and their position in the Inter Deployment Training Cycle. It will incorporate an intelligent search engine (currently under development) that will search all platform resident data, then all battle group resident data and finally, if the request is still not satisfied, transmit the request to a mirror search engine ashore. This mirror will then search all authoritative data sources within the Knowledge Management Center ashore and provide a solution if one resides in these databases, if still unresolved the

request for support will be transferred to the NICC for human intervention.

is the answer to the optimally manned ships of the future.





The next step is vital toward achieving the end goal of a knowledge centric, shared data environment. The tactically significant areas of focus are infrastructure support and people support. For infrastructure support the areas addressed are material support, repair planning, and real time material & manpower issues. For people support, quality of life will be improved by addressing human factors of fatigue and distraction, health care, self/career development, work reduction, information access, and reduced dead time. From aviation issues to virtual technical assists to training, Distance Support

Conclusion

The Distance Support Program has experienced great success and established significant corporate teaming and interaction between the Partner System Commands, support infrastructure, and the Fleet. As such, Distance Support will continue to be a key enabler to adapt today's support infrastructure and business processes to improve Fleet support and Quality of Service/Life. When fully implemented, Distance Support will optimize current services, reduce redundancy, and transform the shore-based infrastructure needed to meet the changing environment of the 21st century. Distance Support will leverage Navy System Commands, Fleet Resources, and Industry partners within a shared data environment to provide the most responsive and efficient support to our sailors anywhere in the world. The knowledge management ability gained through Distance Support will enable the Navy to optimize resource allocation in almost every area while improving feedback and performance. The Distance Support package installed on LINCOLN Battle Group is the first step toward providing full-service, seamless customer support that builds on existing functionality, reduces shipboard workload, and simplifies use by the sailor. The concept is sound, universally accepted, to make this a viable, successful endeavor, all participants must continue work toward the common goal of providing service to the Fleet that enhances the Warfighter’s ability to carry out the assigned mission. Evolving initiatives, such as NMCI,ERP and TF WEB should be significant enables to establish the required conductivity, security and shared data environment, however this strongly forged team of Fleet Commands, Systems Commands, and collaborative support infrastructure ashore must continue to lead the way for process and cultural change. This collaborative infrastructure will be essential for the optimally manned, contractor supported platforms of the future. The communication, shared data environment, and flow requirement objectives for Distance Support today are important steps toward the Knowledge-Centric Navy of the future to manage and process the flow of information more

efficiently, ensuring naval superiority.